

PHARMACOLOGY—The Nature, Action and Use of Drugs—Second Edition—Harry Beckman, M.D., Chairman, Departments of Pharmacology, Marquette University Schools of Medicine and Dentistry; Consulting Physician, Milwaukee County General Hospital and Columbia Hospital; Editor, Year Book of Drug Therapy. W. B. Saunders Company, West Washington Square, Philadelphia 5, Pa., 1961. 805 pages, \$15.50.

This enlarged and thoroughly revised edition of a textbook by a skilled medical writer and learned pharmacologist should be widely received. It promises to be the successor to the encyclopedic Manual of Pharmacology of Torald Sollman, also published by the W. B. Saunders Company, and which went through eight editions. Although in his preface Dr. Beckman infers that his book is intended to give the medical student the information in abbreviated form, this second edition is already as large as Sollman's earlier editions.

Much to the regret of the reviewer, Beckman, like most other textbook writers, continues the practice of placing principles in the first part of the book. Teachers will do well to leave most of the subject matter of his Section I, "A Justification of Pharmacology and Pharmacologists" and Section II, "Some Pharmacologic Background," until the class members, through a study of Section III, "The Actions and Uses of Drugs," have sufficient specific information for the understanding of "principles." In other words, the pedagogic principle of going from the specific or concrete to the abstract should be followed. However, Professor Beckman possesses such a sense of humor and such literary skill that an introductory Section I, Chapter I, written by him at once holds the reader's attention, though he may know little about drugs at the time, while the average textbook writer would have had difficulty making his point clear without much detailed knowledge already possessed by the student.

Section II is made up of twelve chapters on such general topics as "Clinical Effects Achieved with Drugs," "The Nature of Drug Action," "The Fate of Drugs," and "Legal Control of Drugs." Even Dr. Beckman's interesting style is not sufficient to prevent bewilderment of the student who still does not know one drug from the other, with the possible exception of those referred to in his preceding courses of biochemistry and physiology, namely the neurohormones and strychnine. This is especially so for Chapter 11, "The Prescription." The teacher would be wise to introduce the student to pharmacology by plunging into the subject at Section III, Chapter 14, "Drugs That Stimulate Uterine Muscle" and as the occasion permits and demands, develop the principles which the author so ably discusses in his first two Sections.

Section III is well arranged for pedagogical purposes. The first division is entitled "The Pharmacology of Muscle" and is made up of nine chapters, beginning with drugs which stimulate or depress the smooth muscle of the uterus, then cardiac muscle drugs are discussed and finally the skeletal muscles. The intent is obviously to describe drug action in relation to a single type of tissue, namely muscle, without the complication of nerves. This cannot really be done, since as shown in his Chapter 19, the principal drugs affecting skeletal muscle act either at the neuro-muscular junction or on the spinal or higher central nervous system reflex structures.

In the next division, "The Pharmacology of Blood," four chapters are devoted to drugs having effects on circulating plasma or cells or their precursors, and avoids the nervous system more successfully. Then, beginning with Chapter 27 of the division entitled "The Pharmacology of the Blood Vessels," the autonomic nervous system as well as the muscle (or gland) becomes involved, leading up to "The Pharmacology of the Central Nervous System" with its eight chapters and 170 pages. Then the author returns to "The Pharma-

cology of the Autonomic Nervous System" with its seven chapters comprising 60 pages. Then follow the divisions on drugs altering function of the kidneys, liver and gall-bladder, gastrointestinal tract, infection, enzymes and hormones, vitamins, electrolytes and 12 chapters on miscellaneous topics.

Whatever may be the faults of organization for pedagogic reason (and the reviewer recognizes that his own opinion is not generally accepted by textbook writers), there is little to criticize in choice of material or in accuracy of statements. Dr. Beckman has long experience in writing with the view of aiding the practitioner in the choice and use of drugs. He has few peers in his ability to write interestingly, yet with superb scholarship, about so difficult a subject.

CLINTON H. THIENES, M.D.

* * *

BONE CHANGES IN LEPROSY—Vilh. Möller-Christensen, M.D. Ejnar Munksgaard, International Booksellers and Publishers, Ltd., 6 Norregade, Copenhagen, Denmark, 1961. 51 pages, no price.

It is probable that most American doctors, even though they have never actually seen a leper, are vaguely familiar with the horrible deformities and spontaneous amputations which may result from leprosy. According to author Vilhelm Christensen, the number of lepers in the world is steadily increasing, there now being some 12,000,000 as compared with 7,000,000 in 1953. Dr. Christensen is a Danish general practitioner, and apparently became interested in leprosy through his excavations of certain church graveyards, where, during medieval times, a large number of leprosy individuals were buried. His interest in this subject has extended over many years and the excavated material now embraces some 358 specimens, 123 of which are complete skeletons. In addition to this, his experience includes study of living lepers in various leprosaries in the Far East.

In Chapter One of the book he describes a new symptom complex, the "facies leprosa," defined as atrophy of the nasal spine, loosening and loss of the central incisors, due to atrophy and destruction of the maxillary alveolar process.

Chapter Two describes the various leprosy lesions encountered in the nose, mouth and eye, while Chapter Three contains a description of the gross pathological changes observed in the osseous system, both in living patients and in the excavated skeletal remains. Over 90 per cent of the 123 complete skeletons exhibited pathological changes observed in the skull, there being atrophy of nasal spine in 70 per cent, atrophy of the maxillary process in 60 per cent, and evidence of inflammatory changes in the superior surface of the third palate in 90 per cent. Ninety-nine showed typical amputations, ankyloses, twisted fingers, etc. of the extremities, characteristic of neurogenic leprosy. These lesions are all well and profusely illustrated. One of the most interesting pathological changes was observed in the tibiae of some 25 of the skeletons. Their lateral surfaces are veritably corrugated, there being alternating ridges and furrows apparently created by the deposition of a number of long ridges of new bone running parallel to their long axes.

Anyone interested in the history of medicine can spend a pleasant hour reading through this well organized and concisely written little book. It contains only 48 pages of writing and some 15 pages (112) illustrations. It will obviously be of great value to that limited group of physicians who actually care for leprosy patients. There is much of interest to the otologist, the roentgenologist and especially the orthopedic surgeon.

DON KING, M.D.